PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY REPORT ON PATAENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing *(day/month/year)*	30 JUN 2005
Applicant's or agent's file reference PARKP0153WO	IMPORTANT NOTIFICATION

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US03/34629	30 October 2003 (30.10.2003)	01 November 2002 (01.11.2002)

Applicant

PARKER-HANNIFIN CORPORATION

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer John Cabeca Telephone No. (703) 305-3900

Form PCT/IPEA/416 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PARKP0153WO	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/US03/34629	International filing date *(day/month/year)* 30 October 2003 (30.10.2003)	Priority date *(day/month/year)* 01 November 2002 (01.11.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): G06F 15/16; G09F 5/00 and US Cl.: 709/231, 204, 217; 345/734, 740		
Applicant PARKER-HANNIFIN CORPORATION		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:

   a. ☒ *(sent to the applicant and to the International Bureau)* a total of 6 sheets, as follows:

   ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

   ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s))

   _____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
19 May 2004 (19.05.2004)	22 June 2005 (22.06.2005)
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Lisa Vieu John Cabeca Telephone No. (703) 305-3900

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.
PCT/US03/34629

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____ , which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1(b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:
pages 1-19 as originally filed/furnished
pages* NONE received by this Authority on _____
pages* NONE received by this Authority on _____

☒ the claims:
pages 20-25 as originally filed/furnished
pages* NONE as amended (together with any statement) under Article 19
pages* 20-25 received by this Authority on 23 November 2004 (23.11.2004)
pages* NONE received by this Authority on _____

☒ the drawings:
pages 1/4 - 4/4 as originally filed/furnished
pages* NONE received by this Authority on _____
pages* NONE received by this Authority on _____

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

☐ the description, pages _____
☒ the claims, Nos. 25
☐ the drawings, sheets/figs _____
☐ the sequence listing (*specify*): _____
☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/figs _____
☐ the sequence listing (*specify*): _____
☐ any table(s) related to the sequence listing (*specify*): _____

** If item 4 applies, some or all of those sheets may be marked "superseded."*

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US03/34629

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims NONE	YES
	Claims 1-24	NO
Inventive Step (IS)	Claims NONE	YES
	Claims 1-24	NO
Industrial Applicability (IA)	Claims 1-24	YES
	Claims NONE	NO

2. Citations and Explanations (Rule 70.7)

Claims 1-24 lack novelty under PCT Article 33(2) as being anticipated by Bacus et al. Bacus teaches, in column 9,lines 59-67 and in figure 8, the depiction of a remote device for viewing and control by a user. Bacus further teaches, in column 3, line 43 through column 4, line 40, the ability of the user viewing the device, complete with status information, properties, and configuration data, over a network, to control particular aspects of the devices and in return updated characteristics to the user. Bacus further teaches, with regard to claims 17, 18, 19, and 23, the system comprising a second computer located locally to the device for delivering information to the remote user regarding characteristics of the device.

Claims 1-24 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

With regard to the applicants argument that Bacus and Stephens do not discuss graphical objects and how they are rendered, the office would like to point out that Bacus teaches, in column 4, lines 31-40, a user controlling an automated microscope to acquire on a computer screen or window images of the specimen at different user selected magnifications.

CLAIMS

What is claimed is:

1. A system for providing a graphical human-machine interface for a machine having controllable parts, the system comprising:

a) computer readable code on a computer readable medium for receiving information about at least one controllable part of the machine from a machine control device in communication with the machine;

b) computer readable code on a computer readable medium for triggering a change in at least one assigned property of the at least one graphical object corresponding to the at least one controllable part of the machine; and

c) computer readable code on a computer readable medium for rendering and displaying the at least one graphical object following the change in the at least one assigned property.

2. The system of claim 1, wherein the computer readable code of a), b), and c) is configured be executed by a computer in communication with the machine control device via wide area network.

3. The system of claim 2, wherein the wide area network is the Internet.

4. The system of claim 1, wherein information received from the machine control device comprises data representative of that selected from the group consisting of: status information, property information, configuration information, error information, alarm information, user information, and combinations thereof.

5. The system of claim 1, wherein the machine control device is selected from the group consisting of: PLC, PCLC, computer with control software, and combinations thereof.

6. The system of claim 1, wherein the at least one graphic object rendered and displayed is viewable with a web browser.

7. The system of claim 1, wherein the at least one graphic object rendered and displayed is a representation of a physical control for the machine.

8. The system of claim 1, wherein the at least one graphic object rendered and displayed is a representation of a part of the machine.

9. The system of claim 1, wherein the at least one graphic object rendered and displayed is capable of being displayed at the same size on displays of different resolutions.

10. The system of claim 1, wherein the at least one graphic object rendered and displayed are SVG objects.

11. The system of claim 1, wherein at the least one assigned property of at least one graphical object is stored in a style sheet.

12. The system of claim 11, wherein style sheet is selected from the group consisting of CSS, XSL, and combinations thereof.

13. The system of claim 1, wherein the computer readable code on a computer readable medium in at least one of a), b) and c) is a compiled software component.

14. The system of claim 1, wherein the computer readable code on a computer readable medium in at least one of a), b) and c) comprises functionality that is callable from and executable on a plurality of operating systems.

15. The system of claim 1, wherein the computer readable code on a computer readable medium in at least one of a), b) and c) is scriptable.

16. The system of claim 1, wherein the computer readable code on a computer readable medium in at least one of a), b) and c) comprises at least one Java Bean component.

17. The system of claim 1, further comprising:

d) computer readable code on a computer readable medium for receiving a user input associated with a displayed graphical object corresponding to the at least one controllable part of the machine;

e) computer readable code on a computer readable medium for triggering a change in at least one assigned property of the associated graphical object in response to user input;

f) computer readable code on a computer readable medium for rendering and displaying the associated graphical object following the change in at least one assigned property in response to use input; and

g) computer readable code on a computer readable medium for sending data to the machine control device, the data representing an instruction to perform an associated machine function.

18. A system for providing a plurality of graphical human-machine interfaces for a machine having a plurality of controllable parts, the system comprising:

a machine control device in communication with the machine;

a first computer in communication with the machine control device via a local area network, the first computer comprising computer readable code for receiving information about at least one controllable part of a machine, the information comprising rendered graphical objects; and

a second computer in communication with the machine control device via a wide area network, the second computer comprising:

computer readable code for receiving information about at least one controllable part of the machine from the machine control device,

computer readable code for triggering a change in at least one assigned property of the at least one graphical object corresponding to the at least one controllable part of the machine, and

computer readable code for rendering and displaying the at least one graphical object following the change in the at least one assigned property.

19. A system for providing a graphical human-machine interface for a machine having controllable parts, the system comprising:

at least one software component for execution by a computer in communication with a machine control device via a wide area network, the machine control device being in communication with the machine and the at least one software component configured for receiving information about at least one controllable part of the machine from the machine control device;

at least one software component for execution by a computer in communication with the machine control device via a wide area network for triggering a change in at least one assigned property of the at least one graphical object corresponding to the at least one controllable part of the machine;

at least one software component for execution by a computer in communication with the machine control device via a wide area network for rendering and displaying the at least one graphical object following the change in the at least one assigned property;

at least one software component for execution by a computer in communication with the machine control device via a wide area network for receiving a user input associated with a displayed graphical object corresponding to at least one controllable part of the machine;

at least one software component for execution by a computer in communication with the machine control device via a wide area network for triggering a change in the at least one assigned property of the associated graphical object with which the user input is associated;

at least one software component for execution by a computer in communication with the machine control device via a wide area network for rendering and displaying the associated graphical object with which the user input is associated following the change in the at least one assigned property; and

at least one software component for execution by a computer in communication with the machine control device via a wide area network for sending data to the machine control device, the data representing an instruction to perform a an associated machine function.

20. A method for providing a graphical human-machine interface for a machine having a plurality of controllable parts, the method comprising the steps of:

receiving information about at least one controllable part of the machine from a machine control device in communication with the machine;

triggering a change in at least one assigned property of the at least one graphical object corresponding to the at least one controllable part of the machine; and

rendering and displaying the at least one graphical object following the change in the at least one assigned property.

21. The method of claim 20, wherein the steps of receiving, triggering, and rendering are each performed at a computer configured to receive information from the machine control device via wide area network.

22. The method of claim 20, further comprising the steps of:

receiving a user input associated with a displayed graphical object corresponding to the at least one controllable part of the machine;

triggering a change in at least one assigned property of the associated graphical object in response to user input;

rendering and displaying the associated graphical object following the change in at least one assigned property in response to the user input; and

sending data to the machine control device, the data representing an instruction to perform an associated machine function.

23. A method for providing a plurality of graphical human-machine machine interfaces for a machine having a plurality of controllable parts, the method comprising the steps of:

sending from a machine control device in communication with the machine to a first computer via a local area network information about at least one controllable part of the machine, the information comprising rendered graphical objects;

sending from the machine control device in communication with the machine to a second computer via a wide area network information about at least one controllable part of the machine, the information consisting of non-rendered graphics information;

displaying the received rendered graphical objects at the first computer;

triggering at the second computer a change in at least one assigned property of at least one graphical object corresponding to the at least one controllable part of the machine about which information was received; and

rendering and displaying at the second computer the at least one graphical object following the change in the at least one assigned property.

24. The method of claim 23, wherein the wide area network is the Internet.

25. The method of claim 23, wherein the graphical objects displayed at the first computer are GDI+ graphical objects and the graphical objects displayed at the second computer are SVG graphical objects.